

James Ogden on the introduction of machines into the Manchester cotton industry, 1783

(James Ogden, *A Description of Manchester... By a Native of the Town* (1783), pp 86-94; in D. B. Horn and Mary Ransome, eds., *English Historical Documents, Vol. X, 1714-1783*, N.Y.: Oxford University Press, 1969, pp. 465-67.)

The acquisition of this last branch [the printing of cotton moved to Manchester from London in the late 18th century], with large exports in foreign trade, have given such employment to large capitals, that the interior business of the country is, in a great measure, given up to the middle class of manufacturers and petty chapmen: but no exertion of the manufacturers or workmen could have answered the demands of trade, without the introduction of spinning machines.

These were first used by the country people on a confined scale, twelve spindles being thought a great affair at first, and the awkward posture required to spin on them, was discouraging to grown up people, while they saw, with a degree of surprize, children, from nine to twelve years of age, manage them with dexterity, which brought plenty into families, that were before overburthened with children, and delivered many a poor endeavouring weaver out of bondage to which they were exposed, by the insolence of spinners, and abatement of their work, for which evils there was no remedy till spinning-jennies were invented. The following state of their case, will give our readers an idea of the oppression.

From the time that the original system was changed in the fustian branch, of buying pieces in the grey from the weavers, by delivering them out work, the custom of giving them the weft in cops [balls of thread wound on spindles], which obtained for a while, grew into disuse, as there was no detecting the knavery of spinners till a piece came in woven; so that the practice was changed, and wool given with warps, the weaver answering for spinning; and the weavers, in a scarcity of spinning, have been paid less for the weft than they gave the spinner, but durst not complain, much less abate the spinner, lest their looms should stand unemployed: but when jennies were introduced, and children could work on them, the case was altered, and many who had been insolent before, were glad to be employed in carding and stubbing [Combing and slightly twisting wool or cotton in preparation for spinning] cotton for these engines.

The plenty of weft produced by this means gave uneasiness to the country people, and the weavers were afraid lest the manufacturers should demand finer weft woven at the former prices, which occasioned some risings, and the jennies were opposed, some being demolished before those who used them could be protected, or convince others of their general utility, till *Dorning Rasbotham*, Esq.; a worthy magistrate who lived in that part of the country towards *Bolton*, where they were used, convinced the weavers, in a sensible printed address, that it was their true interest to encourage jennies, urging the former insolence of spinners, and the happiness of such as had already relieved themselves, and procured employment for their children; and appealed to their own experience of the fly shuttle, against which the like clamour had been raised, and the inventor driven to *France*, where he found encouragement, while his shuttles are yet in such estimation here, as to be used generally even on narrow goods, to the benefit of trade in general,

without any bad consequence in the experience of several years, but they are rather of particular benefit to the weavers.

This seasonable address produced a general acquiescence in the use of these engines, to a certain number of spindles, but they were soon multiplied to three or four times the quantity; nor did the invention of ingenious mechanics rest here, for the demand of twist for warps was greater as weft grew plenty, therefore engines were soon constructed for this purpose: one in particular was purchased at a price which was a considerable reward for the contriver's ingenuity, and exposed at the Exchange, where he spun on it, and all that were disposed to see the operation, were admitted gratis.

The improvements kept increasing till the capital engines for twist were perfected; and it is amazing to see what thousands of spindles may be put in motion by a water wheel, and managed mostly by children, without confusion, and with less waste of cotton than the former methods: but the carding and stubbing, preparatory to twisting, required a greater range of invention than the twisting engines, and there were sufficient motives to encourage the attempt; for while carding was performed by common cards, and stubbing by the hand, these operations took half the price of spinning.

The first attempts were carding engines, which are very curious, and now brought to great perfection, though they are still improving; and an engine has now been contrived for converting the carded wool to stubbing, by drawing it to about the thickness of candle-wick, preparatory to throwing it into twist.

We suppose, and even wish that the principle of this last engine may be applied to reduce combed sheeps wool to a stubbing, for the purpose of spinning it upon the more complex machines, which would be a great acquisition to some branches of trade here. It is already spun on the common flax wheel with a fly (which has been adopted by these engines) the length way of the combing, which is capable of being handled and divided at pleasure, and may be prepared as a stubbing for the spinning machines, by any contrivance in the drawing out, which has a respect to the length of staple and cohesion of parts, wherein combed wool differs from carded cotton.

When the larger machines were first set to work by water, they produced such excellent twist for warps, that they soon outrivalled the makers of warps on the larger jennies, some of whom had several at work, and had reaped a good harvest of profit by them; but as the larger machines were encouraged, they suffered abatement in proportion; and one of them concerned, making his complaint to others when they were intoxicated at the ale-house, a resolution was taken to destroy the water machines, and some were demolished before the owners could be protected, or the deluded country people who joined them could reflect, that if more warps were made, there would be a greater demand for weft from their jennies, and a better price for it; which has been fully experienced in the introduction of muslins, for no contrivance in the other machines can make the thread hold when it is so slack thrown as to suit for weft, nor can it be supposed the attempt would be made, if possible, as the demand of twist for warps will fully employ them; for if cotton comes down to a reasonable price, the warps made of this twist would be as cheap as

those made of yarn, and keep the money here which was sent abroad for that article, there being no comparison between yam and cotton warps for goodness, and the advantages in that case would be greater to the workmen, the manufacturers, and the consumer, as well as to the general interest of the kingdom.

We had given in our manuscript a particular description of the principles and movements of these machines; but have suppressed it for the present, as it has been hinted that this publication might be translated into *French*, and communicated to our rivals in trade; which is giving a consequence we little expected to our description of *Manchester*, and history of its manufactures.

We are now hastening to a conclusion, and, shall observe by the way, that perhaps nothing has more contributed to the improvements in trade here, than the free admission of workmen in every branch, whereby the trade has been kept open to strangers of every description, who contribute to its improvement by their ingenuity; *for Manchester* being only a market town, governed by Constables, is not subject to such regulations as are made in corporations, to favour freemen in exclusion of strangers: and, indeed, nothing could be more fatal to its trading interest, if it should be incorporated, and have representatives in Parliament. For such is the general course of popular contests, that in places where the immediate dependence of the inhabitants is not upon trade, the health and morals of the people are ruined upon these occasions. How much more fatal would the effects be in such a town as this, where to the above evils, there would be added the interruption of trade, and perpetuation of ill-will between masters and workmen, who were independent; while those who had nothing to depend on but labour, would contract habits of idleness and drunkenness, or fly to other places, where they could be free from the tyrannical restrictions and partial usage which generally prevail in corporations.